

Irish Standard I.S. EN ISO 22282-2:2012

Geotechnical investigation and testing -Geohydraulic testing - Part 2: Water permeability tests in a borehole using open systems (ISO 22282-2:2012)

© NSAI 2012

No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments.	/corrigenda/National Anne	exes issued since public	cation:	
The National Standards Author documents:	ity of Ireland (NSAI) produ	ces the following cate	gories of formal	
I.S. xxx: Irish Standard – subject to public consultation.	national specification base	ed on the consensus of	an expert panel and	
S.R. xxx: Standard Recom panel and subject to public con	mendation - recommendat sultation.	ion based on the cons	ensus of an expert	
SWiFT xxx: A rapidly develop participants of an NSAI worksho	oed recommendatory docu op.	ment based on the cor	nsensus of the	
This document replaces:				
This document is based on. EN ISO 22282-2:2012	. Published: 13 June, 2012			
This document was publish under the authority of the and comes into effect on: 13 June, 2012			ICS number: 93.020	
<b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie		
Údarás um Chaighdeáin Náisiúnta na hÉireann				

# EUROPEAN STANDARD NORME EUROPÉENNE

**EN ISO 22282-2** 

EUROPÄISCHE NORM

June 2012

ICS 93.020

#### **English Version**

Geotechnical investigation and testing - Geohydraulic testing - Part 2: Water permeability tests in a borehole using open systems (ISO 22282-2:2012)

Reconnaissance et essais géotechniques - Essais géohydrauliques - Partie 2: Essais de perméabilité à l'eau dans un forage en tube ouvert (ISO 22282-2:2012) Geotechnische Erkundung und Untersuchung -Geohydraulische Versuche - Teil 2: Wasserdurchlässigkeitsversuche in einem Bohrloch unter Anwendung offener Systeme (ISO 22282-2:2012)

This European Standard was approved by CEN on 31 May 2012.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

# EN ISO 22282-2:2012 (E)

Contents	Page
Foreword	3

EN ISO 22282-2:2012 (E)

## **Foreword**

This document (EN ISO 22282-2:2012) has been prepared by Technical Committee CEN/TC 341 "Geotechnical Investigation and Testing", the secretariat of which is held by ELOT, in collaboration with Technical Committee ISO/TC 182 "Geotechnics".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2012, and conflicting national standards shall be withdrawn at the latest by December 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a free page sample. Access the full version online.

I.S. EN ISO 22282-2:2012

This page is intentionally left BLANK.

This is a free page sample. Access the full version online.

# I.S. EN ISO 22282-2:2012 INTERNATIONAL STANDARD

ISO 22282-2

First edition 2012-06-01

# Geotechnical investigation and testing — Geohydraulic testing —

# Part 2:

Water permeability tests in a borehole using open systems

Reconnaissance et essais géotechniques — Essais géohydrauliques — Partie 2: Essais de perméabilité à l'eau dans un forage en tube ouvert



ISO 22282-2:2012(E)



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2012

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org
Published in Switzerland

# ISO 22282-2:2012(E)

Contents  Foreword		Page
		iv
1	Scope	
2	Normative references	1
3 3.1 3.2	Terms, definitions and symbols  Terms and definitions  Symbols	
4	Test principle	2
5	Equipment	2
6 6.1 6.2	Test procedure Preparation of a test section	3
7 7.1 7.2 7.3	Test results Constant flow rate test method Variable head test method Constant head test method	10 10
8 8.1 8.2	Reports Field report Test report	11
Anne	ex A (informative) Example of record of measured values and test results	13
Anne	ex B (informative) Interpretation of test results	14
Biblio	iography	27

ISO 22282-2:2012(E)

#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 22282-2 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical investigation and testing*, in collaboration with Technical Committee ISO/TC 182, *Geotechnics*, Subcommittee SC 1, *Geotechnical investigation and testing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 22282 consists of the following parts, under the general title *Geotechnical investigation and testing* — *Geohydraulic testing*:

- Part 1: General rules
- Part 2: Water permeability tests in a borehole using open systems
- Part 3: Water pressure tests in rock
- Part 4: Pumping tests
- Part 5: Infiltrometer tests
- Part 6: Water permeability tests in a borehole using closed systems

# Geotechnical investigation and testing — Geohydraulic testing —

# Part 2:

# Water permeability tests in a borehole using open systems

### 1 Scope

This part of ISO 22282 specifies requirements for the determination of the local permeability in soils and rocks below and above groundwater level in an open hole by water permeability tests as part of the geotechnical investigation services according to EN 1997-1 and EN 1997-2.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14688-1, Geotechnical investigation and testing — Identification and classification of soil — Part 1: Identification and description

ISO 14689-1, Geotechnical investigation and testing — Identification and classification of rock — Part 1: Identification and description

ISO 22282-1: 2011, Geotechnical investigation and testing — Geohydraulic testing — Part 1: General rules

ISO 22475-1, Geotechnical investigation and testing — Sampling methods and groundwater measurements — Part 1: Technical principles for execution

#### 3 Terms, definitions and symbols

#### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 22475-1 and ISO 22282-1 apply.

## 3.2 Symbols

For the purposes of this document, the symbols given in Table 1 apply.



This is a free preview	<ul> <li>Purchase the entire</li> </ul>	e publication at the link below:
------------------------	---	----------------------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation